

50C

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/533,232A

Source: Pct

Date Processed by STIC: 1/10/06

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 01/18/2006

PATENT APPLICATION: US/10/533,232A

TIME: 15:19:05

Input Set : E:\Updated 1392-10-19-2.ST25.txt

Output Set: N:\CRF4\01182006\J533232A.raw

3 <110> APPLICANT: Cooper, Bret
 5 <120> TITLE OF INVENTION: CELL PROLIFERATION-RELATED POLYPEPTIDES AND USES THEREFOR
 7 <130> FILE REFERENCE: 1392-10-19-2
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/533,232A
 C--> 9 <141> CURRENT FILING DATE: 2005-04-29
 9 <150> PRIOR APPLICATION NUMBER: US 60/436,565
 10 <151> PRIOR FILING DATE: 2002-12-26
 12 <160> NUMBER OF SEQ ID NOS: 349
 14 <170> SOFTWARE: PatentIn version 3.3
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 885
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Oryza sativa
 22 <220> FEATURE:
 23 <221> NAME/KEY: CDS
 24 <222> LOCATION: (1)..(885)
 26 <400> SEQUENCE: 1

27	atg gcg cct ccc tgc ggc gat gcc gcg gcg gct gcc tcc gcc gcg ccc	48
28	Met Ala Pro Pro Cys Gly Asp Ala Ala Ala Ala Ser Ala Ala Pro	
29	1 5 10 15	
31	ggc ctg gcc aac ctg ctc att cgc gaa ggc gcc ggc ctc cct tcg cgt	96
32	Gly Leu Ala Asn Leu Leu Ile Arg Glu Gly Ala Gly Leu Pro Ser Arg	
33	20 25 30	
35	ccc gaa cgg tac ccg cca ttc cgg ccc tgt act tct gat tcc ttt gct	144
36	Pro Glu Arg Tyr Pro Pro Phe Arg Pro Cys Thr Ser Asp Ser Phe Ala	
37	35 40 45	
39	cca atc tct agg gaa ggg gac gat att ccc ccc caa aaa aaa tcg gtt	192
40	Pro Ile Ser Arg Glu Gly Asp Asp Ile Pro Pro Gln Lys Lys Ser Val	
41	50 55 60	
43	tct tta cgc agc ggc ggc ggc ggc aat gcg gca gag agg gag gag ggc	240
44	Ser Leu Arg Ser Gly Gly Gly Gly Asn Ala Ala Glu Arg Glu Glu Gly	
45	65 70 75 80	
47	ggt gcg aac agg aac ggg aag aag gag aag acc ggg gcg cag agg atc	288
48	Gly Ala Asn Arg Asn Gly Lys Lys Glu Lys Thr Gly Ala Gln Arg Ile	
49	85 90 95	
51	acc ggg tgg ggg ctc cgt gag ttc agc aag ata gtt tct aag aaa gtt	336
52	Thr Gly Trp Gly Leu Arg Glu Phe Ser Lys Ile Val Ser Lys Lys Val	
53	100 105 110	
55	gag gcc aaa gga aga acc aca tat aat gag gtt gcc gat gag att ttt	384
56	Glu Ala Lys Gly Arg Thr Thr Tyr Asn Glu Val Ala Asp Glu Ile Phe	
57	115 120 125	
59	gcg gag ctg aag tcc att acg cag aac ggt ctg gag ttt gat gag aag	432
60	Ala Glu Leu Lys Ser Ile Thr Gln Asn Gly Leu Glu Phe Asp Glu Lys	

(pg. 6)

RAW SEQUENCE LISTING

DATE: 01/18/2006

PATENT APPLICATION: US/10/533,232A

TIME: 15:19:05

Input Set : E:\Updated 1392-10-19-2.ST25.txt

Output Set: N:\CRF4\01182006\J533232A.raw

```

61      130      135      140
63 aat att agg cgg agg gta tat gat gct ttc aat gtg ctc att gca att      480
64 Asn Ile Arg Arg Arg Val Tyr Asp Ala Phe Asn Val Leu Ile Ala Ile
65 145      150      155      160
67 cgt gtt att gca aaa gat aaa aag gag ata aag tgg atg ggc ctt act      528
68 Arg Val Ile Ala Lys Asp Lys Lys Glu Ile Lys Trp Met Gly Leu Thr
69      165      170      175
71 aat tat aga tac gaa aag ata cag aag ttg gag gaa gtt cac aaa gaa      576
72 Asn Tyr Arg Tyr Glu Lys Ile Gln Lys Leu Glu Glu Val His Lys Glu
73      180      185      190
75 ctc atc acc agg atc aag aat aag aag aag ctt ctc cag gaa att gaa      624
76 Leu Ile Thr Arg Ile Lys Asn Lys Lys Lys Leu Leu Gln Glu Ile Glu
77      195      200      205
79 aag cag ttt gat gac ctt cag aat att aca tta cgc aac cag gct agt      672
80 Lys Gln Phe Asp Asp Leu Gln Asn Ile Thr Leu Arg Asn Gln Ala Ser
81      210      215      220
83 cag agg cca gca gaa agt gtt aat ggc atc ctc ctt ccg ttc tta ttg      720
84 Gln Arg Pro Ala Glu Ser Val Asn Gly Ile Leu Leu Pro Phe Leu Leu
85 225      230      235      240
87 atc aag aca tcc cga aaa gca agg gtg gaa att gag att tcg gaa gat      768
88 Ile Lys Thr Ser Arg Lys Ala Arg Val Glu Ile Glu Ile Ser Glu Asp
89      245      250      255
91 tcg aag ttt gca cgg ttc gac ttc aac ggt gca cca ttc acc atg cat      816
92 Ser Lys Phe Ala Arg Phe Asp Phe Asn Gly Ala Pro Phe Thr Met His
93      260      265      270
95 gat gat gta tca atc ctt gaa gcc atc agg cgt aac aaa gga aga gct      864
96 Asp Asp Val Ser Ile Leu Glu Ala Ile Arg Arg Asn Lys Gly Arg Ala
97      275      280      285
99 ggc ctc tcc att cac cct taa      885
100 Gly Leu Ser Ile His Pro
101      290
104 <210> SEQ ID NO: 2
105 <211> LENGTH: 294
106 <212> TYPE: PRT
107 <213> ORGANISM: Oryza sativa
109 <400> SEQUENCE: 2
111 Met Ala Pro Pro Cys Gly Asp Ala Ala Ala Ala Ala Ser Ala Ala Pro
112 1      5      10      15
115 Gly Leu Ala Asn Leu Leu Ile Arg Glu Gly Ala Gly Leu Pro Ser Arg
116      20      25      30
119 Pro Glu Arg Tyr Pro Pro Phe Arg Pro Cys Thr Ser Asp Ser Phe Ala
120      35      40      45
123 Pro Ile Ser Arg Glu Gly Asp Asp Ile Pro Pro Gln Lys Lys Ser Val
124      50      55      60
127 Ser Leu Arg Ser Gly Gly Gly Gly Asn Ala Ala Glu Arg Glu Glu Gly
128 65      70      75      80
131 Gly Ala Asn Arg Asn Gly Lys Lys Glu Lys Thr Gly Ala Gln Arg Ile
132      85      90      95
135 Thr Gly Trp Gly Leu Arg Glu Phe Ser Lys Ile Val Ser Lys Lys Val

```

RAW SEQUENCE LISTING

DATE: 01/18/2006

PATENT APPLICATION: US/10/533,232A

TIME: 15:19:05

Input Set : E:\Updated 1392-10-19-2.ST25.txt

Output Set: N:\CRF4\01182006\J533232A.raw

136	100	105	110
139 Glu Ala Lys Gly Arg Thr Thr Tyr Asn Glu Val Ala Asp Glu Ile Phe			
140	115	120	125
143 Ala Glu Leu Lys Ser Ile Thr Gln Asn Gly Leu Glu Phe Asp Glu Lys			
144	130	135	140
147 Asn Ile Arg Arg Arg Val Tyr Asp Ala Phe Asn Val Leu Ile Ala Ile			
148 145	150	155	160
151 Arg Val Ile Ala Lys Asp Lys Lys Glu Ile Lys Trp Met Gly Leu Thr			
152	165	170	175
155 Asn Tyr Arg Tyr Glu Lys Ile Gln Lys Leu Glu Glu Val His Lys Glu			
156	180	185	190
159 Leu Ile Thr Arg Ile Lys Asn Lys Lys Lys Leu Leu Gln Glu Ile Glu			
160	195	200	205
163 Lys Gln Phe Asp Asp Leu Gln Asn Ile Thr Leu Arg Asn Gln Ala Ser			
164	210	215	220
167 Gln Arg Pro Ala Glu Ser Val Asn Gly Ile Leu Leu Pro Phe Leu Leu			
168 225	230	235	240
171 Ile Lys Thr Ser Arg Lys Ala Arg Val Glu Ile Glu Ile Ser Glu Asp			
172	245	250	255
175 Ser Lys Phe Ala Arg Phe Asp Phe Asn Gly Ala Pro Phe Thr Met His			
176	260	265	270
179 Asp Asp Val Ser Ile Leu Glu Ala Ile Arg Arg Asn Lys Gly Arg Ala			
180	275	280	285
183 Gly Leu Ser Ile His Pro			
184	290		
187 <210> SEQ ID NO: 3			
188 <211> LENGTH: 1041			
189 <212> TYPE: DNA			
190 <213> ORGANISM: Oryza sativa			
193 <220> FEATURE:			
194 <221> NAME/KEY: CDS			
195 <222> LOCATION: (1)..(1041)			
197 <400> SEQUENCE: 3			
198 atg gtc tcc ggc gcg gcg cat tcg gcc tcc acc agt ggc ggc ggc ggg	48		
199 Met Val Ser Gly Ala Ala His Ser Ala Ser Thr Ser Gly Gly Gly Gly			
200 1	5	10	15
202 ggg agc gag ggc tcc ccc acc ggc cgc gcc gcg ccg ggc atg cag ggc	96		
203 Gly Ser Glu Gly Ser Pro Thr Gly Arg Ala Ala Pro Gly Met Gln Gly			
204	20	25	30
206 ggc ggc agc gcc gcc acg ccc gcc gcc tcg gcc tcc gcg tcc acg ccg	144		
207 Gly Gly Ser Ala Ala Thr Pro Ala Ala Ser Ala Ser Ala Ser Thr Pro			
208	35	40	45
210 gcc agc gag acc acc gtc gcc cgc cgc ctc gac ggc ctc gac atc cag	192		
211 Ala Ser Glu Thr Thr Val Ala Arg Arg Leu Asp Gly Leu Asp Ile Gln			
212	50	55	60
214 ggc gac gac gcg ccc tcg tcg cag ccc gcc acg agc aag aag aaa aaa	240		
215 Gly Asp Asp Ala Pro Ser Ser Gln Pro Ala Thr Ser Lys Lys Lys Lys			
216 65	70	75	80
218 agg ggg cct gga aca cgt gca acg ggc cct gac aag ggt ggc cgt gga	288		

RAW SEQUENCE LISTING

DATE: 01/18/2006

PATENT APPLICATION: US/10/533,232A

TIME: 15:19:05

Input Set : E:\Updated 1392-10-19-2.ST25.txt

Output Set: N:\CRF4\01182006\J533232A.raw

219	Arg	Gly	Pro	Gly	Thr	Arg	Ala	Thr	Gly	Pro	Asp	Lys	Gly	Gly	Arg	Gly	
220					85					90					95		
222	ttg	cgc	caa	ttt	agt	atg	aaa	gtt	tgt	gag	aaa	gtt	gaa	agc	aaa	ggg	336
223	Leu	Arg	Gln	Phe	Ser	Met	Lys	Val	Cys	Glu	Lys	Val	Glu	Ser	Lys	Gly	
224				100					105					110			
226	aga	aca	acc	tac	aac	gag	gtg	gca	gat	gag	ctt	gta	gct	gag	ttt	gca	384
227	Arg	Thr	Thr	Tyr	Asn	Glu	Val	Ala	Asp	Glu	Leu	Val	Ala	Glu	Phe	Ala	
228				115					120					125			
230	gac	ccc	aac	aat	aat	ttt	gca	tca	cct	gat	cct	gac	aac	cct	aac	aca	432
231	Asp	Pro	Asn	Asn	Asn	Phe	Ala	Ser	Pro	Asp	Pro	Asp	Asn	Pro	Asn	Thr	
232		130					135						140				
234	cca	caa	ttt	gat	gag	aaa	aat	ata	cga	cga	agg	gtt	tat	gat	gca	ttg	480
235	Pro	Gln	Phe	Asp	Glu	Lys	Asn	Ile	Arg	Arg	Arg	Val	Tyr	Asp	Ala	Leu	
236	145					150				155						160	
238	aat	gtc	ctg	atg	gct	atg	gat	att	ata	tct	aag	gat	aaa	aag	gaa	att	528
239	Asn	Val	Leu	Met	Ala	Met	Asp	Ile	Ile	Ser	Lys	Asp	Lys	Lys	Glu	Ile	
240					165					170					175		
242	cag	tgg	aag	ggc	ttg	cct	cgg	aca	agt	atg	agc	gat	gtt	gaa	gaa	ttg	576
243	Gln	Trp	Lys	Gly	Leu	Pro	Arg	Thr	Ser	Met	Ser	Asp	Val	Glu	Glu	Leu	
244				180					185					190			
246	aag	aca	gag	atc	atc	gga	ctg	aaa	ggt	agg	atc	gac	aag	aaa	aat	gca	624
247	Lys	Thr	Glu	Ile	Ile	Gly	Leu	Lys	Gly	Arg	Ile	Asp	Lys	Lys	Asn	Ala	
248				195					200					205			
250	tat	ttg	cag	gag	tta	gaa	gat	caa	ttt	gta	ggt	ctt	caa	aac	ttg	gca	672
251	Tyr	Leu	Gln	Glu	Leu	Glu	Asp	Gln	Phe	Val	Gly	Leu	Gln	Asn	Leu	Ala	
252		210						215					220				
254	cag	cga	aac	gag	cag	ctt	tat	ggt	tca	gga	aat	gct	cct	tca	gga	gga	720
255	Gln	Arg	Asn	Glu	Gln	Leu	Tyr	Gly	Ser	Gly	Asn	Ala	Pro	Ser	Gly	Gly	
256	225					230				235					240		
258	gtg	gca	ttg	cca	ttt	ata	ttg	gtg	cag	aca	cgt	cct	cat	gct	aca	gta	768
259	Val	Ala	Leu	Pro	Phe	Ile	Leu	Val	Gln	Thr	Arg	Pro	His	Ala	Thr	Val	
260					245					250					255		
262	gaa	gtg	gag	ata	tca	gaa	gat	atg	cag	ctg	gtg	cat	ttt	gat	ttc	aat	816
263	Glu	Val	Glu	Ile	Ser	Glu	Asp	Met	Gln	Leu	Val	His	Phe	Asp	Phe	Asn	
264				260					265					270			
266	agc	act	cca	ttt	gaa	ctg	cat	gac	gat	tcc	ttt	gta	ctg	aaa	gca	ttg	864
267	Ser	Thr	Pro	Phe	Glu	Leu	His	Asp	Asp	Ser	Phe	Val	Leu	Lys	Ala	Leu	
268				275				280						285			
270	ggg	ttc	tct	ggc	aaa	gaa	cca	gat	gat	acg	caa	gcc	tgg	gtt	gga	aat	912
271	Gly	Phe	Ser	Gly	Lys	Glu	Pro	Asp	Asp	Thr	Gln	Ala	Trp	Val	Gly	Asn	
272		290						295					300				
274	gga	ggt	gag	tgc	tca	acc	aca	cct	atc	tat	cat	caa	tca	ccc	caa	gtt	960
275	Gly	Gly	Glu	Cys	Ser	Thr	Thr	Pro	Ile	Tyr	His	Gln	Ser	Pro	Gln	Val	
276	305					310					315				320		
278	gcg	agg	cca	aac	gga	gtt	aga	cta	cca	aca	tcg	ccc	cct	att	ccc	ggt	1008
279	Ala	Arg	Pro	Asn	Gly	Val	Arg	Leu	Pro	Thr	Ser	Pro	Pro	Ile	Pro	Gly	
280					325					330					335		
282	ata	ctt	aaa	ggg	cgt	gtc	aag	cat	gaa	cat	tag						1041
283	Ile	Leu	Lys	Gly	Arg	Val	Lys	His	Glu	His							

RAW SEQUENCE LISTING

DATE: 01/18/2006

PATENT APPLICATION: US/10/533,232A

TIME: 15:19:05

Input Set : E:\Updated 1392-10-19-2.ST25.txt

Output Set: N:\CRF4\01182006\J533232A.raw

```

284          340          345
287 <210> SEQ ID NO: 4
288 <211> LENGTH: 346
289 <212> TYPE: PRT
290 <213> ORGANISM: Oryza sativa
292 <400> SEQUENCE: 4
294 Met Val Ser Gly Ala Ala His Ser Ala Ser Thr Ser Gly Gly Gly Gly
295 1          5          10          15
298 Gly Ser Glu Gly Ser Pro Thr Gly Arg Ala Ala Pro Gly Met Gln Gly
299          20          25          30
302 Gly Gly Ser Ala Ala Thr Pro Ala Ala Ser Ala Ser Ala Ser Thr Pro
303          35          40          45
306 Ala Ser Glu Thr Thr Val Ala Arg Arg Leu Asp Gly Leu Asp Ile Gln
307          50          55          60
310 Gly Asp Asp Ala Pro Ser Ser Gln Pro Ala Thr Ser Lys Lys Lys Lys
311 65          70          75          80
314 Arg Gly Pro Gly Thr Arg Ala Thr Gly Pro Asp Lys Gly Gly Arg Gly
315          85          90          95
318 Leu Arg Gln Phe Ser Met Lys Val Cys Glu Lys Val Glu Ser Lys Gly
319          100         105         110
322 Arg Thr Thr Tyr Asn Glu Val Ala Asp Glu Leu Val Ala Glu Phe Ala
323          115         120         125
326 Asp Pro Asn Asn Asn Phe Ala Ser Pro Asp Pro Asp Asn Pro Asn Thr
327          130         135         140
330 Pro Gln Phe Asp Glu Lys Asn Ile Arg Arg Arg Val Tyr Asp Ala Leu
331 145         150         155         160
334 Asn Val Leu Met Ala Met Asp Ile Ile Ser Lys Asp Lys Lys Glu Ile
335          165         170         175
338 Gln Trp Lys Gly Leu Pro Arg Thr Ser Met Ser Asp Val Glu Glu Leu
339          180         185         190
342 Lys Thr Glu Ile Ile Gly Leu Lys Gly Arg Ile Asp Lys Lys Asn Ala
343          195         200         205
346 Tyr Leu Gln Glu Leu Glu Asp Gln Phe Val Gly Leu Gln Asn Leu Ala
347          210         215         220
350 Gln Arg Asn Glu Gln Leu Tyr Gly Ser Gly Asn Ala Pro Ser Gly Gly
351 225         230         235         240
354 Val Ala Leu Pro Phe Ile Leu Val Gln Thr Arg Pro His Ala Thr Val
355          245         250         255
358 Glu Val Glu Ile Ser Glu Asp Met Gln Leu Val His Phe Asp Phe Asn
359          260         265         270
362 Ser Thr Pro Phe Glu Leu His Asp Asp Ser Phe Val Leu Lys Ala Leu
363          275         280         285
366 Gly Phe Ser Gly Lys Glu Pro Asp Asp Thr Gln Ala Trp Val Gly Asn
367          290         295         300
370 Gly Gly Glu Cys Ser Thr Thr Pro Ile Tyr His Gln Ser Pro Gln Val
371 305         310         315         320
374 Ala Arg Pro Asn Gly Val Arg Leu Pro Thr Ser Pro Pro Ile Pro Gly
375          325         330         335
378 Ile Leu Lys Gly Arg Val Lys His Glu His

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/18/2006
PATENT APPLICATION: US/10/533,232A TIME: 15:19:06

Input Set : E:\Updated 1392-10-19-2.ST25.txt
Output Set: N:\CRF4\01182006\J533232A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 702
Seq#:5; Xaa Pos. 234
Seq#:6; Xaa Pos. 234
Seq#:59; Xaa Pos. 53
Seq#:60; Xaa Pos. 53
Seq#:79; Xaa Pos. 71
Seq#:80; Xaa Pos. 71
Seq#:111; Xaa Pos. 23,56,57,104,126
Seq#:112; Xaa Pos. 23,56,57,104,126
Seq#:121; Xaa Pos. 64
Seq#:122; Xaa Pos. 64
Seq#:137; Xaa Pos. 34
Seq#:138; Xaa Pos. 34
Seq#:151; Xaa Pos. 956,961,1086
Seq#:152; Xaa Pos. 956,961,1086
Seq#:161; Xaa Pos. 264
Seq#:162; Xaa Pos. 264
Seq#:293; Xaa Pos. 226
Seq#:294; Xaa Pos. 226
Seq#:303; Xaa Pos. 2,6
Seq#:304; Xaa Pos. 2,6

VERIFICATION SUMMARY

DATE: 01/18/2006

PATENT APPLICATION: US/10/533,232A

TIME: 15:19:06

Input Set : E:\Updated 1392-10-19-2.ST25.txt

Output Set: N:\CRF4\01182006\J533232A.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:672
M:341 Repeated in SeqNo=5
L:628 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:224
L:5592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:192
L:5668 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:48
L:7859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:240
L:8015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:64
L:11189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111 after pos.:96
M:341 Repeated in SeqNo=111
L:11365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112 after pos.:16
M:341 Repeated in SeqNo=112
L:12305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121 after pos.:192
L:12397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122 after pos.:48
L:13846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137 after pos.:144
L:14094 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138 after pos.:32
L:16762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:151 after pos.:2880
M:341 Repeated in SeqNo=151
L:17100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:152 after pos.:944
M:341 Repeated in SeqNo=152
L:18054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:161 after pos.:816
L:18166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:162 after pos.:256
L:31623 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:293 after pos.:720
L:31703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294 after pos.:224
L:32484 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:303 after pos.:48
L:32781 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:304 after pos.:0